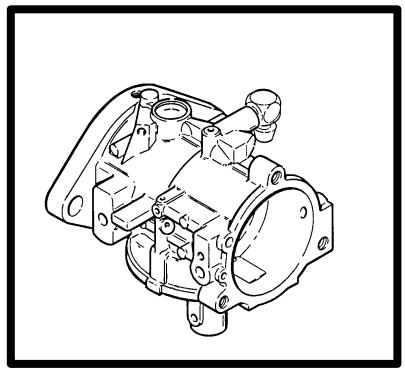
# **FUEL SYSTEM &** CARBURETION





# CARBURETOR

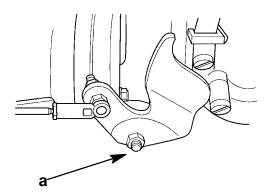


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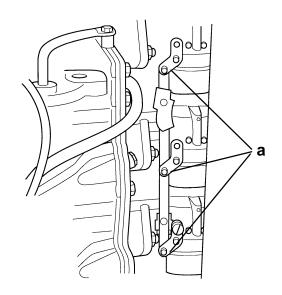
1. Remove nut securing throttle cam to stud.



- a Nut, Throttle Cam
- 2. Remove throttle cam form stud.

**NOTE:** Carburetors and cover may be removed as an assembly.

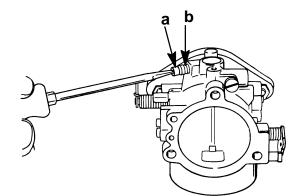
3. Remove "E" clips from throttle arm.



- a "E" Clips
- 4. Remove throttle bar assembly.
- 5. Disconnect fuel line.
- 6. Remove primer hoses from carburetor.
- 7. Remove carburetor flange nuts.
- 8. Remove carburetor(s).

## **Disassembling Carburetor**

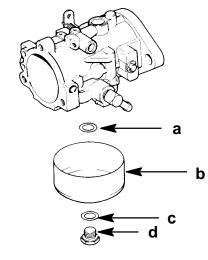
1. Remove idle mixture screw and spring.



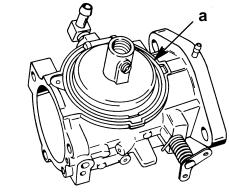
a - Screw, Idle Mixture

b - Spring

2. Remove screw, gasket, fuel bowl, and gasket.



- a Gasket
- b Fuel Bowl
- c Gasket
- d Screw
- Remove fuel bowl gasket from groove in carburetor.

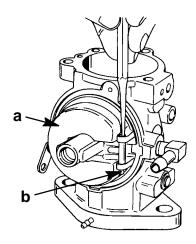




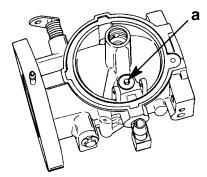


- Remove float. 4.
- Drive out float pin.

NOTE: Drive float pin through so that knurled end comes out first.



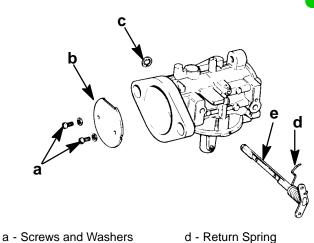
- a Float
- b Pin, Knurled End
- Remove float.
- 5. Remove inlet needle.



a - Inlet Needle

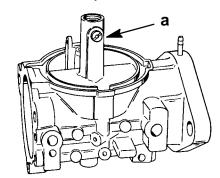
#### As Needed

- Remove throttle assembly. 6.
- Remove screws and washer from shutter.
- Hold throttle in wide open position.
- Pull throttle shutter out of housing.
- Remove E-clip.
- Unhook return spring from drive pin on carburetor.
- Pull throttle shaft out of housing.



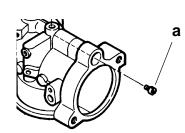
- b Shutter, Throttle

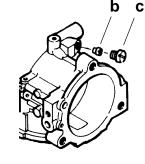
- e Throttle Shaft
- c E-Clip
- Remove main fuel jet. 7.



a - Main Fuel Jet

8. 90/95 HP - Remove idle air jet. 120 HP - Remove sealing screw and intermediate fuel jet.





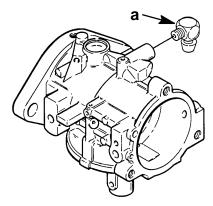
90/95 HP

a - Idle Air Jet b - Intermediate Fuel Jet

120 HP

c - Sealing Screw



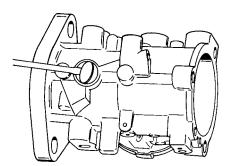


a - Elbow

- 10. Remove welch plug.
- Drill hole through welch plug.

#### **IMPORTANT:** Do not drill into carburetor body.

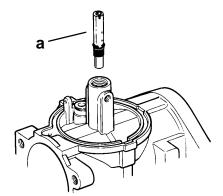
• Insert a small screwdriver in hole and pry plug out of housing.



- 11. Remove idle tube.
- Place punch on bottom end of idle tube.

# **IMPORTANT:** Note the depth of the idle tube prior to removal. It must be installed to this position.

- Carefully tap on punch until cup plug and idle tube come free of body channel.
- 12. Unscrew main nozzle and remove it from body channel.

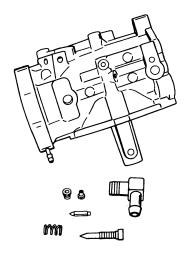


a - Main Nozzle

**NOTE:** In some cases, the position of the idle tube may make it necessary to remove the tube prior to removing the nozzle.

13. Inspect the following:

Inspect:	Look For:	
Idle mixture screw	Rings or grooves on point	
Inlet needle	Rings or grooves on point	
Idle spring	Compressed spring	
Primer connectors	Clogging	
Body	Pitting	
Jets	Clogging	



14. Clean entire carburetor with solvent.

**IMPORTANT:** Do not allow non-metal parts to come in contact with solvent.

### A WARNING

Follow solvent manufacturer's directions for use.

## **Assembling Carburetor**

1. Thread main nozzle into body channel.

**IMPORTANT:** Idle tube must contact nozzle in front or carburetor will run lean.

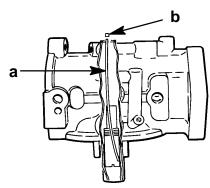
**NOTE:** Be sure nozzle is threaded in completely. Do not over tighten nozzle.

- 2. Install idle tube.
- Slide idle tube (flanged end up) into body channel.

**IMPORTANT:** Idle tube must contact nozzle in front or engine will run lean.



• Carefully tap cup plug into opening with punch.

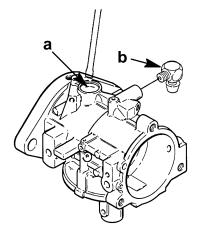


- a Idle Tube
- Seal plug with nail polish.
- 3. Place welch plug into recess of carburetor body.

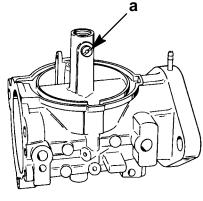
b - Cap Plug

• Carefully tap center of welch plug.

**NOTE:** Tapping will spread the plug and hold it in place.



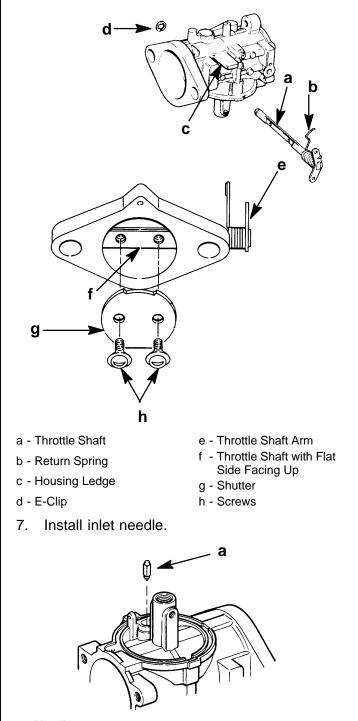
- a Welch Plug
- Seal top of plug with nail polish.
- 4. Install elbow.
- 5. Install main fuel jet.



b - Elbow

a - Main Fuel Jet

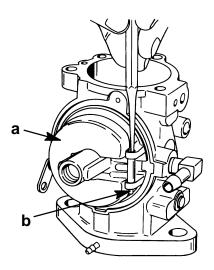
- 6. Install throttle assembly.
- Slide throttle shaft into carburetor housing.
- Lay end of return spring on ledge of housing.
- Secure throttle shaft with E-clip.
- Turn throttle shaft arm clockwise until flat side of shaft faces up.
- Slide shutter into slot of shaft with numbered side facing out.
- Apply Loctite (Special Tool No. FT-8936-1) to screws and install in throttle shutter.



■ a - Needle FUEL SYSTEM AND CARBURETION

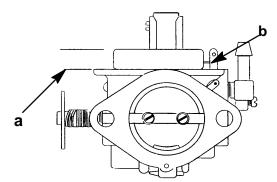


- 8. Install float.
- Position float on carburetor.
- Carefully slide pin through bracket and float.
- Tap pin until knurled end is retained in carburetor casting.



- a Float
- b Pin
- 9. Measure float height.

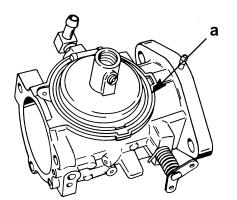
**NOTE:** To adjust, bend inlet needle tab on float until float sits parallel to flange.



a - Parallel to Flange

b - Float Tab

10. Install gasket in groove at bottom of carburetor.



a - Gasket

11. Install fuel bowl assembly: bowl, gaskets, and screw.

# **High Altitude Jetting**

The carburetor jet is for engine operation at sea level through 2500 feet (762 m) above sea level. For engine operation above 2500 feet re-jet the carburetor to the size and altitude specified below.

1995 - 1997 MAIN FUEL JET SIZE 90/95XR HP

Sport Jet	Carburetor		
Operating Elevation	Тор	Middle	Bottom
Sea Level-2500 ft.	.072	.072	.074
2500-5000 ft.	.070	.070	.072
5000-7500 ft.	.068	.068	.070
7500-10,000 ft.	.066	.066	.068

	1995
MAIN FUE	L JET SIZE 120 HP
ort Jet	Carburetor

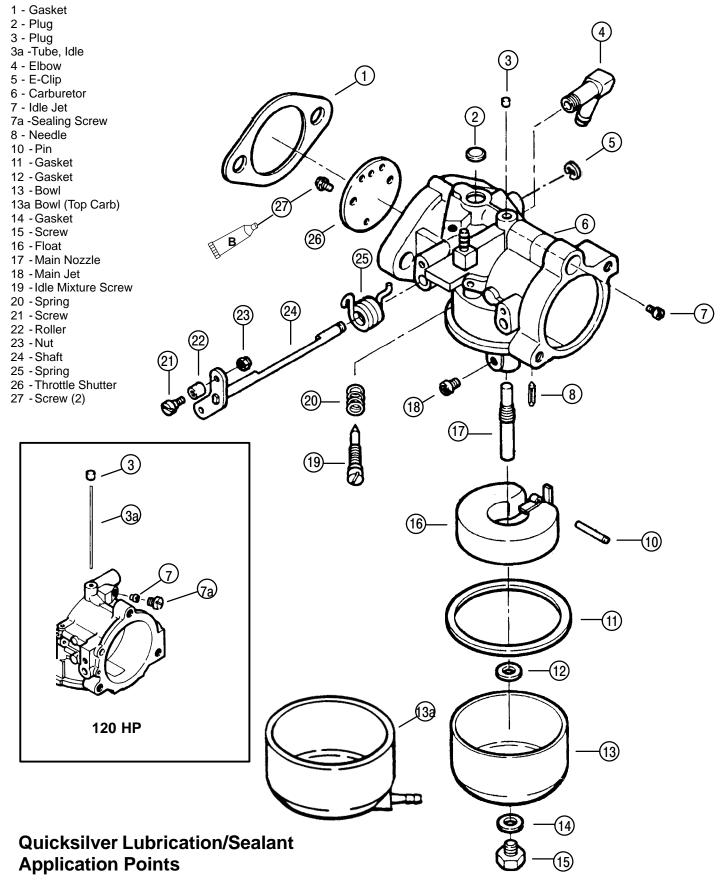
Sport Jet	Carburetor	
Operating Elevation	Тор	Bottom
Sea Level-1500 ft.	.090	.092
1500-3000 ft.	.088	.090
3000-4500 ft.	.086	.088
4500-6000 ft.	.084	.086
6000-10,000 ft.	.082	.084

1996 - 1997 MAIN FUEL JET SIZE 120XR HP

Sport Jet	Carburetor	
Operating Elevation	Тор	Bottom
Sea Level-1500 ft.	.088	.090
1500-3000 ft.	.086	.088
3000-4500 ft.	.084	.086
4500-6000 ft.	.082	.084
6000-10,000 ft.	.080	.082

# Exploded View - Carburetor - 90/95/120 HP





**B** Loctite 271 (92-823089--1)